

Indicator 55. Extent to Which the Institutional Framework Supports the Conservation and Sustainable Management of Forests, Including the Capacity To Develop and Maintain Human Resource Skills Across Relevant Disciplines

What Is the Indicator and Why Is It Important?

Extensive knowledge and skills applied by persons engaged in the development and implementation of forest resource policies and programs are critical to accomplishing the wide-ranging goals of forest sustainability and conservation. Of special importance to sustainability is access to a broad range of disciplines and resource orientations. These disciplinary and resource skills are developed via formal educational programs, as well as via professional work experiences and access to continuing education opportunities.

What Does the Indicator Show?

Professional educational opportunities in the United States occur in some form in virtually all public and private natural resource and related organizations. Those activities range from formal professional education in a university setting to professional continuing education via electronic media, and from forest practice workshops for timber harvesters to national and international conferences on forest sustainability and conservation. Educational endeavors to maintain human resource skills are enormous in breadth and substance. Information about the professional workforce of private organizations focused on forest sustainability is particularly limited in quantity and quality.

Universities, colleges, and some technical schools generally provide formal education to resource professionals. Such educational programs offer students an opportunity to select from an wide array of subjects and disciplines. Information about the type, focus, and investments in these educational programs is

widely available, although questionable in quality and consistency. In recent years, formal professional education programs appear to have increased students' exposure to a wider range of disciplines and a broader set of resources. Unclear, however, is the magnitude of this increase and the extent to which integration of knowledge actually occurs across disciplines and resources. Formal programs are often required to conform to standards specified by accreditation programs. In 2001, nearly 2,200 academic degrees were awarded in some field of forest resources. Seventy-one percent of those degrees were at the baccalaureate level.

The wide array of organizations offering continuing education programs for forest resource professionals are often implemented in a partnership fashion. The approaches to continuing education range from correspondence courses to formal doctoral programs and from short-term workshops to extensive international forest study tours. Universities and colleges are major sources of continuing education, although employers and some private organizations provide such opportunities as well. At least three Federal statutes provide for the continuing education of forest resource professionals and those in related professions.

Occupational registration and certification programs focused on forest resource professionals and timber harvesters commonly require the maintenance of professional skills applied to forest and related natural resources. State governments have been most active in developing and implementing such programs. At least 16 States, in 1996, registered, certified, or licensed forestry professionals, while 25 States applied similar occupational programs to timber harvesters.